

Dorchester County Sanitary District-Bonnie Brook (PSWID #0090001)  
Annual Drinking Water Quality Report

This is the Annual Drinking Water Quality Report for the period of January through December of 2009. It has been compiled as required by the Safe Drinking Water Act amended by Congress in 1996. The report is designed to inform you about the quality of water provided to you every day.

The source of our drinking water is from two wells in deep confined aquifers. A confined aquifer is a sort of underground reservoir or deposit of water, which is bounded above and below by other layers of earth that water will not pass through. These layers create a barrier, which prevents contamination from all forms of human induced pollution. The aquifer is tapped by drilling a well and pumping the water to the surface for distribution. The two wells are located on Mallard Lane in Bonnie Brook.

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, organic and inorganic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Contaminants that may be present in source water before we treat it include:

- ❖ *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, and agricultural livestock operations and wildlife.
- ❖ *Pesticides and herbicides*, which may come from a variety of sources such as agriculture and residential uses.
- ❖ *Radioactive contaminants*, which are naturally occurring.
- ❖ *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

We are pleased to report that our drinking water is safe and meets state and federal requirements without the need for any type of treatment. This report is provided in compliance with federal regulations and will be provided annually. This report outlines the quality of our drinking water and what that quality means.

Although our water supply requires no treatment, we chlorinate our wells to insure disinfecting. Maryland Department of the Environment requires us to routinely monitor for certain contaminants on a three or four year cycle. The treatment plant is inspected daily, Monday through Friday, and tested for chlorine residuals.

We serve approximately 300 people through approximately 110 connections.

The presence of some contaminants in drinking water is unavoidable. It is important to understand that the detection of a substance in the drinking water does not constitute a known threat to public health, because they were found at a level less than the MCL and below the level that the EPA currently feels may constitute a health threat. MCL's are set at very stringent levels, and our water has proved to be below those levels for the constituents listed.

If you have any questions about this report, your water supply, or the times, dates, and locations of public meetings, please contact the Dorchester County Sanitary District business office at 410-228-6222.



## Water Quality Data

The table below lists all of the drinking water contaminants that we detected up to the end of the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & abbreviations used below:

- ❖ **Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety and are non-enforceable public health goals.
- ❖ **Maximum Contaminant Level (MCL):** the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- ❖ **Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- ❖ **n/a:** not applicable    **nd:** not detectable at testing limit    **ppb:** parts per billion or micrograms per liter  
**ppm:** parts per million or milligrams per liter

Regulated Contaminants	MCL	MCLG	Bonnie Brook Water	Violation	Typical Source
Arsenic(ppm)	.05	0	0.004	No	Erosion of natural deposits. Runoff from orchards. Runoff from glass and electronics production waste
Copper (ppm)	AL = 1.3 ppm		0.205 ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppm)	AL = 0.015 ppm		0.009 ppm	No	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (ppm)	4	4	0.89	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Alpha Emitters (pCi/L)	15	0	1.2	No	Erosion of natural deposits
Beta Emitters (pCi/L)	50	0	7	No	Decay of natural and man-made deposits
Radium 226 & Radium 228 (combined)(pCi/L)	5	0	0.11	No	Erosion of natural deposits
TTHM (Total Trihalomethanes ) (ppb)	80	N/A	1.36	No	Byproducts of chlorine disinfection
HAA5 (Haloacetic Acids) (ppb)	60	N/A	0	No	Byproducts of chlorine disinfection

Unregulated Contaminants	MCL /MCLG	Bonnie Brook Water
Sodium (ppm)	Unregulated	145.3 ppm
Sulfate (ppm)	Unregulated	16 ppm

**LEAD NOTICE:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Dorchester County Sanitary District (Bonnie Brook) is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4971 or at <http://www.epa.gov/safewater/lead>.

**RADON:** Radon is a radioactive gas that occurs naturally in some groundwater. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. During 2000, the level detected in our water supply was 280 pCi/L. EPA is proposing to regulate this substance in the range of 300 pCi/L to 1,500 pCi/L. Radon is released into homes and groundwater from soil. Inhalation of radon gas has been linked to lung cancer, however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, contact your local health department, or call (800) SOS – RADON.